

REMARKS

Claims 1-2, 5, 7-8, 10-16, 18-29, 32-34, 36, 38, and 45-52 are pending. Claim 1 has been amended to concern an intranasal dispenser and to recite “the outlet orifice being a spray-head shaped and sized for insertion into a user’s nostril”. These amendments are consistent with the description of the embodiment of the invention shown in the drawings. Claim 17 has been cancelled.

Applicant responds to each of the Action’s rejections in the order in which they are presented in the Action.

Section 102 / 103 Rejections Overcome

A. Claims 1, 2, 5, 7-8, 10,11, 17-29, 32-34, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by German Patent No. DE 100 17 438 (Katz). Applicant respectfully traverses this rejection.

As articulated by the MPEP 706.02 (emphasis added):

“for anticipation under 35 U.S.C. 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly.”

Katz fails to teach every aspect recited in claim 1 and provides no motivation as to how to arrive at such. The cream dispenser in Katz clearly does not teach or suggest a device having a metering chamber as recited in claim 1. From the Merriam-Webster Online Dictionary (2008), metering is defined “as to supply in a measured or regulated amount.” As one of ordinary skill in the art would conclude from Katz, the volume of cream dispensed would be variable. The design of the plunger, front face and outlet valve (see Katz Figure 1 3, 5 and 17, respectively), wherein the plunger front face 5 does not match the front wall 6 of the pumping chamber 7, do not define a space having a precise volume. This is inherent as there are voids between the plunger front face 5 and

the front wall 6 and thus dead spots for cream to reside. There is also not a proper seal between the plunger 3 and the pumping chamber 7 and the device would accordingly not be capable of delivering a *metered* dose, as required by the claimed invention.

Moreover, Examiner has not given sufficient regard to the following feature in claim 1:

“a bleed arrangement adapted in use to bleed a surplus volume of the fluid product from the metering chamber as its moves from the first volumetric state to the second volumetric state”

The Examiner appears to dismiss this feature as non-limiting due to it being a functional requirement. However, for Katz to anticipate claim 1, it must still be clear and unambiguous that the dispenser disclosed in Katz is capable of achieving this function.

However, having regard to the dispenser shown in Figure 1 of Katz, there is shown a follow-on piston 23 which closes the rear end of the container 2 which supplies cream to the pumping chamber 7. All that can be gathered from Katz is that this piston moves upwards as cream is transferred into the pumping chamber 7 as the plunger is retracted (to the left in Figure 1). There is absolutely no information in Katz which makes it inevitable that the piston 23 moves backwards on the pumping stroke of the plunger 3, as would be required for bleeding to occur. So, Katz provides no explicit or implicit disclosure of the “bleed” feature of claim 1. Expressed another way, the “bleed” feature would not be inevitable in a cream dispenser made according to the disclosure of Katz.

Thus, the Examiner is wrong to opine it is inherent in Katz that bleeding is capable of being achieved, since Katz provides insufficient information to make this conclusion.

Claim 1 is also now directed to an intranasal dispenser and further specifies that the outlet orifice is a spray-head shaped and sized for insertion into a user's nostril. The dispenser of claim 1 is thus further distinguished from Katz by these amendments.

Moreover, there is no art of record which would have prompted a ordinary person of skill in the art to modify or develop the disclosure in Katz to arrive at an intranasal dispenser according to claim 1.

For at least the foregoing reasons, Applicant respectfully submits that claim 1 is patentable over Katz and requests that this rejection be withdrawn.

Claims 2, 5, 7, 8, 16, 18-29, 32-34, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action's rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

B. Claims 1, 2, 5, 7, 8, 10, 11, 18-29, 32-33, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(e) as obvious over U.S. Patent No. 7,008,433 (Voellmicke *et al.*). Applicant respectfully traverses this rejection.

Voellmicke proposes a viscous bone cement dispenser designed as "a mixing and delivery device having both high-pressure delivery and a compact size is now available" (see column 3, lines 27 - 29). In operation, the injection chamber (21) is filling by the movement of the inner face of the piston (35) past the entry opening (25). This allows the viscous bone cement to enter the injection chamber from the reservoir (3). There is no control expressed or implied in Voellmicke to control the stroke of the piston (defined by 35 and 36) opposite of the exit opening (25) of injection chamber (21). This leads to a variable delivery volume from the injection chamber (21) dependent on the distance

swept out by the piston, based on the stroke of the piston, as controlled by the operation of the lever (41). The farther the lever (41) is drawn, the larger the stroke of the piston (35,36) within the delivery chamber (21) and hence the larger the amount of viscous bone cement dispensed. This is clearly not a metering chamber, but is instead a variable delivery device.

The “bleed” requirement of claim 1 is also not expressly or inherently disclosed by Voellmicke, since Voellmicke provides insufficient information to reach this conclusion. Again, if a device according to Voellmicke were reproduced from the teaching of Voellmicke, this feature would not inevitably result.

Voellmicke also does not disclose an intranasal dispenser having a spray-head, as claimed.

Thus, Voellmicke is clearly not anticipatory.

Furthermore, the claimed intranasal dispenser would not obviously derive from Voellmicke, whose disclosure concerns a viscous bone cement dispenser.

For at least these reasons, Applicant respectfully submits that claim 1 is patentable over Voellmicke *et al.* and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action’s rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

C. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,077,494 (Spaude *et al.*). Applicant respectfully traverses this rejection.

There is yet again no clear and unambiguous disclosure in Spaude of the “bleed” requirement of claim 1 of the present application. Having regard to Figure 1, it is to be noted that the plunger 8 in the cylinder 2 is loaded by the spring 11 in a direction towards the grease inlet 42 of the pump cylinder 28. Spaude provides no information that makes it inevitable that the plunger 8 can retract against the force of the spring 11 in the dispensing stroke of the piston 40 in the cylinder 28, as would be required for bleeding to occur.

Claim 1 is therefore novel over Spaude for this reason alone.

Moreover, as Spaude concerns a grease gun, claim 1 is further distinguished by being directed to an intranasal dispenser.

For at least these reasons, Applicant respectfully submits that claim 1 is patentable over Spaude and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action’s rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

D. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-34, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,435,647 (Engseth). Applicant respectfully traverses this rejection.

Claim 1 is clearly not anticipated by Engseth as it does not disclose an intranasal dispenser, as claimed. Rather, like Spaude, Engseth concerns a grease gun.

Engseth also does not clearly and unambiguously disclose the “bleed” feature of claim 1. In Engseth, the piston 28;128 in the lubricant-containing receptacle 11;124 is spring-loaded 31;127, so the comments made above re Spaude apply likewise.

For at least these reasons, Applicant respectfully submits that claim 1 is patentable over Engseth and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-34, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action’s rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

E. Claims 1-2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 have been rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,497,762 (Davis). Applicant respectfully traverses this rejection.

Claim 1 is clearly not anticipated by Davis as it does not disclose an intranasal dispenser, as claimed. Rather, like Spaude and Engseth, Davis concerns a grease gun.

Davis also does not clearly and unambiguously disclose the “bleed” feature of claim 1. Davis has a piston 54 in the grease-containing reservoir 10 which is specified at column 2, lines 50-54 to be “for exerting pressure upon the supply of grease [in the reservoir 10] and moving it toward and through the port

22 as it is required”. Nothing in Davis teaches that the piston 54 is capable of being moved in the opposite direction by the grease pressure created as the plunger 20 advances in the cylinder 18, as would be required for bleeding to occur.

For at least these reasons, Applicant respectfully submits that claim 1 is patentable over Davis and requests that this rejection be withdrawn.

Claims 2, 5, 7-8, 10-15, 18-29, 32-33, 36, 38, and 45-52 each depend from patentable independent claim 1. For at least this reason and without acquiescing in the Action’s rejections of these claims, Applicant respectfully submits that these dependent claims are also patentable and requests that these rejections be withdrawn. Applicant expressly reserves the right to argue the separate patentability of one or more of these dependent claims at a future date.

F. Claims 16 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Davis in view of German ‘438 (Katz). Applicant respectfully traverses this rejection.

Claim 16 depends on claim 1 which is novel and inventive over Davis in combination with Katz, since such combination would not overcome the shortfalls of each document relative to claim 1 mentioned above.

For at least this reason, Applicant respectfully submits that claim 16 is patentable over Davis and requests that this rejection be withdrawn. All rights to argue for the independent patentability of this subordinate claim are reserved.

III. Conclusion

All claim rejections being addressed in full, Applicant respectfully requests the withdrawal of the outstanding objections and rejections and the issuance of a Notice of Allowance. Should the Examiner have any questions regarding the foregoing, Applicant respectfully requests that the Examiner contact the undersigned, who can be reached at (919) 483-9024.

Respectfully submitted,

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